

REMARKS

Claims 1-8, 11-15, 17-25, 27-28, 45-48, 50-55, 57-65, 67-70, 72-76, 78, and 80-84 remain in this application.

The examiner previously allowed claims 45-48, 50-55, 57-65, 67, and 68. The examiner stated that claims 2, 73, and 81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 11, 27, 28, 45, 50, 67, 68, 69, 70, 72, and 78 have previously been amended. Claims 10, 16, 56, 71, and 79 have previously been canceled.

Claims 9, 26, 29-44, 49, 66, 77, and 85-89 have previously been withdrawn as the result of an earlier restriction requirement. In view of the examiner's earlier restriction requirement, the applicants retain the right to present claims 9, 26, 29-44, 49, 66, 77, and 85-89 in a divisional application.

I. CLAIM REJECTIONS – 35 U.S.C. § 102

A. Examiner's Statements

The examiner rejected claims 1, 3-8, 11-12, 15, 25, 27-28, 69-70, 72-76, 78, 80, and 82-84 under 35 U.S.C. § 102(b) as being anticipated by Flores (U.S. Patent No. 5,701,751) [hereinafter Flores].

B. Law

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.¹ The identical invention must be shown in as complete detail as is contained in the ... claim.² In addition to disclosing every claim limitation, an anticipatory prior art reference must enable the practice of the invention and describe it sufficiently to have placed it in the possession of a person of ordinary skill in the field of the invention.³

¹ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

² *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

³ *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

C. Claims 1, 3-8, 11-12, 15, 25, 27-28, 69-70, 72-76, 78, 80, and 82-84

Claims 1, 3-8, 11-12, 15, 25, 27-28, 69-70, 72-76, 78, 80, and 82-84 are not anticipated by Flores because Flores does not disclose a heat storage unit that absorbs heat with a phase change material enclosed in a jacket and where all phases of the phase change material are maintained within the jacket as recited by the claims.

Flores teaches an assembly including a lower tank/cold exchanger (19) (evaporator), compressor (23), lubrication system, and upper tank/hot heat exchanger (24) (condenser) assemblies. As shown in FIG. 4, the evaporator (17) encompasses a lower tank of stored water (16) in thermal contact with a cold heat exchanger (18) from the electronics and is all within a Dewar flask (15). The compressor (23) maintains the lower tank (17) at the specified atmospheric pressure value. It accomplishes this task by pulling the vaporized water or stream out of the lower tank (17) and transporting it into the upper tank or hot heat exchanger (24), outside the Dewar flask.

The claims recite a heat storage unit including a phase change material enclosed in a jacket that absorbs and stores heat with the phase change material. However, the claims recite that all phases of the phase change material are maintained within the jacket, instead of transferring the phase change material to another location. The examiner equates the Dewar flask (15) of Flores to the recited jacket in the claims. Assuming for the sake of argument that the Dewar flask (15) may equate to a jacket as recited in the claims (without conceding such), Flores specifically teaches that vaporized water or steam is pulled out of the lower tank (17) and into the upper tank or hot heat exchanger (24), outside the Dewar flask (15). Thus, Flores does not teach maintaining all phases of the phase change material in the Dewar flask (15). Therefore, the applicants respectfully submit that Flores does not anticipate claims 1, 3-8, 11-12, 15, 25, 27-28, 69-70, 72-76, 78, 80, and 82-84 because Flores fails to disclose each and every element of claims 1, 3-8, 11-12, 15, 25, 27-28, 69-70, 72-76, 78, 80, and 82-84. Accordingly, the applicants submit that claims 1, 3-8, 11-12, 15, 25, 27-28, 69-70, 72-76, 78, 80, and 82-84 are patentably distinguishable over Flores and requests that the examiner withdraw the rejection.

II. CLAIMS REJECTIONS – 35 U.S.C. § 103

A. Examiner's Statements

The examiner rejected claims 13-14 under 35 U.S.C. §103(a) as being unpatentable over Flores in view of Boesen (U.S. Patent No. 4,375,157) [hereinafter Boesen]. The examiner rejected claims 17-18 under 35 U.S.C. § 103(a) as being unpatentable over Flores. The examiner rejected claims 17-24 under 35 U.S.C. § 103(a) as being unpatentable over Flores in view of Drube et al. (U.S. Patent No. 6,799,429) [hereinafter Drube].

B. Law

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.⁴ If the examiner does not produce a *prima facie* case, the applicants are under no obligation to submit evidence of nonobviousness.

To establish a *prima facie* case of obviousness, the following tenets of patent law must be adhered to: (a) the claimed invention must be considered as a whole; (b) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (c) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (d) reasonable expectation of success is the standard with which obviousness is determined.⁵ Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure.⁶

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.⁷ Thus, a statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima*

⁴ *In re Rouffet*, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998).

⁵ *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5 (Fed. Cir. 1986).

⁶ *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

⁷ *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); *see also In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).

facie case of obviousness without some objective reason to combine the teachings of the references.⁸ Additionally, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.⁹

C. Claims 13 and 14 Are Not Unpatentable Over Flores In View Of Boesen

The applicants repeat the remarks made above for claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.¹⁰ As claims 13 and 14 depend from claim 1, claims 13 and 14 are also nonobvious under 35 U.S.C. § 103(a). Therefore, the applicants request that the examiner withdraw the rejection with respect to claims 13 and 14 as well.

D. Claims 17-18 Are Not Unpatentable Over Flores

The applicants repeat the remarks made above for claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.¹¹ As claims 17 and 18 depend from claim 1, claims 17 and 18 are also nonobvious under 35 U.S.C. § 103(a). Therefore, the applicants request that the examiner withdraw the rejection with respect to claims 17 and 18 as well.

E. Claims 17-24 Are Not Unpatentable Over Flores In View Of Drube

The applicants repeat the remarks made above for claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.¹² As claims 17-24 depend from claim 1, claims 17-24 are also nonobvious under 35 U.S.C. § 103(a). Therefore, the applicants request that the examiner withdraw the rejection with respect to claims 17-24 as well.

III. ALLOWABLE SUBJECT MATTER

The examiner allowed claims 45-48, 50-55, 57-65, 67, and 68. The examiner stated that claims 2, 73, and 81 are objected to as being dependent upon a rejected base

⁸ *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); see also *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999).

⁹ *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

¹⁰ *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

¹¹ *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

¹² *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The applicants respectfully submit that the independent base claims for 2, 73, and 81, claims 1, 69, and 78 are in condition for allowance as discussed above. As such, the applicants respectfully submit that claims 2, 73, and 81 are also in condition for allowance. Therefore, the applicants respectfully request that the examiner remove the objection with respect to claims 2, 73, and 81.

The applicants note that the examiner rejected claim 73 in the 35 USC § 102 rejection above but also listed claim 73 as an objected-to claim. The applicants request clarification of the examiner's position of the allowability of claim 73.

IV. STATEMENT REGARDING CLAIMS

The applicants have argued the allowability of the claims by addressing the comments by the examiner in this paper as well as previously during the prosecution of this application. By doing so, the applicants are in no way limiting their ability to argue additional points of novelty regarding the independent claims or dependent claims at a later date.

CONCLUSION

The applicants respectfully request reconsideration the non-allowed and withdrawn claims and that a timely Notice of Allowance be issued in this case. If the examiner feels that a telephone conference would expedite the resolution of this case, the examiner is invited to contact the undersigned.

In the course of the foregoing discussions, the applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. There may also be other distinctions between the claims and the prior art that have yet to be raised, but that may be raised in the future.

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C.

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Deposit Account Number 03-2769 (ref. 1391-34500) of Conley Rose, P.C., Houston,
Texas.

Respectfully submitted,
CONLEY ROSE, P.C.

A handwritten signature in black ink, appearing to read "Collin A. Rose". The signature is fluid and cursive, with the first name "Collin" and last name "Rose" being more prominent than the middle initial "A".

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